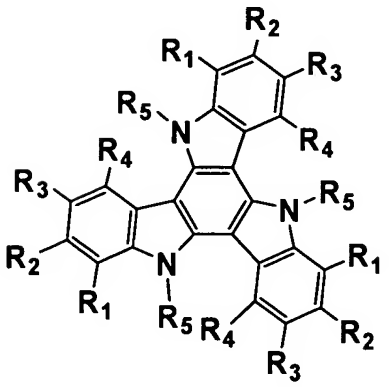
IN THE CLAIMS:

1. ~~[1]~~ (Currently amended) A substituted Sym-triindole derivative represented by the following general formula (1):

~~[formula 1]~~



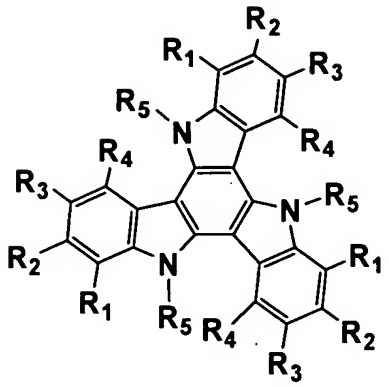
(1)

~~[~~wherein $R_1$, $R_2$, $R_3$ and $R_4$ are each independently hydrogen, halogen, C1-C6 alkyl group, C1-C6 haloalkyl group, substituted C1-C6 alkyl group, C2-C6 alkenyl group, substituted C2-C6 alkenyl group, C2-C6 alkynyl group, substituted C2-C6 alkynyl group, hydroxyl group, C1-C6 alkoxy group, aryloxy group, amino group, mono-substituted amino group, di-substituted amino group, acylamino group, mercapto group, C1-C6 alkylsulfenyl group, C1-C6 haloalkylsulfenyl group, arylsulfenyl group, substituted arylsulfenyl group, C1-C6 alkylsulfinyl group, C1-C6 haloalkylsulfinyl group, aralkylsulfenyl group, arylsulfinyl group, substituted arylsulfinyl

group, C1-C6 alkylsulfonyl group, C1-C6 haloalkylsulfonyl group, arylsulfonyl group, substituted arylsulfonyl group, sulfonic acid group (hydroxysulfonyl group), aryl group, substituted aryl group, cyano group, nitro group, formyl group, acyl group, carboxyl group, C1-C6 alkoxycarbonyl group, carbamoyl group, N-mono-substituted carbamoyl group, N,N-di-substituted carbamoyl group, hydrazonomethyl group (-CH=N-$NH_2$ group), N-mono-substituted hydrazonomethyl group, N,N-di-substituted hydrazonomethyl group, oximemethyl group (hydroxyiminomethyl group), C1-C6 alkoxyiminomethyl group, or aryloxyiminomethyl group; $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; wherein, in no event, all of $R_1$, $R_2$, $R_3$ and $R_4$ are hydrogen simultaneously~~)~~.

2.~~[2]~~ (Currently amended) A process for producing a substituted Sym-triindole derivative represented by the following general formula (1):

~~[formula 3]~~

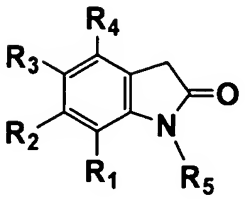


(1)

(wherein $R_1$, $R_2$, $R_3$ and $R_4$ are each independently hydrogen, halogen, C1-C6 alkyl group, C1-C6 haloalkyl group, substituted C1-C6 alkyl group, C2-C6 alkenyl group, substituted C2-C6 alkenyl group, C2-C6 alkynyl group, substituted C2-C6 alkynyl group, hydroxyl group, C1-C6 alkoxy group, aryloxy group, amino group, mono-substituted amino group, di-substituted amino group, acylamino group, mercapto group, C1-C6 alkylsulfenyl group, C1-C6 haloalkylsulfenyl group, aralkylsulfenyl group, arylsulfenyl group, substituted arylsulfenyl group, C1-C6 alkylsulfinyl group, C1-C6 haloalkylsulfinyl group, arylsulfinyl group, substituted arylsulfinyl group, C1-C6 alkylsulfonyl group, C1-C6 haloalkylsulfonyl group, arylsulfonyl group, substituted arylsulfonyl group, sulfonic acid group (hydroxysulfonyl group), aryl group, substituted aryl group, cyano group, nitro group, formyl group,

acyl group, carboxyl group, C1-C6 alkoxycarbonyl group, carbamoyl group, N-mono-substituted carbamoyl group, N,N-disubstituted carbamoyl group, hydrazonomethyl group (-CH=N-$NH_2$ group), N-mono-substituted hydrazonomethyl group, N,N-disubstituted hydrazonomethyl group, oximemethyl group (hydroxyiminomethyl group), C1-C6 alkoxyiminomethyl group, or aryloxyiminomethyl group; $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; wherein, in no event, all of $R_1$, $R_2$, $R_3$ and $R_4$ are hydrogen simultaneously), which process comprises reacting a substituted oxyindole represented by the following general formula (2):

~~[formula 2]~~

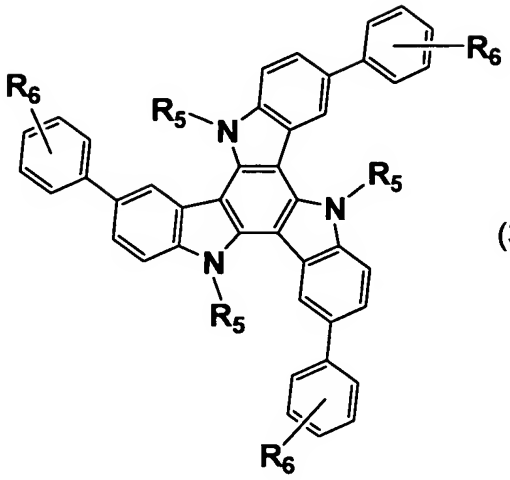



(2)

~~(~~wherein $R_1$, $R_2$, $R_3$, $R_4$ and $R_5$ have the same definitions as given above~~)~~, with a phosphorus oxyhalide.

3. ~~[3]~~ (Currently amended) A Sym-triindole derivative represented by the following general formula (3):

~~[formula 4]~~

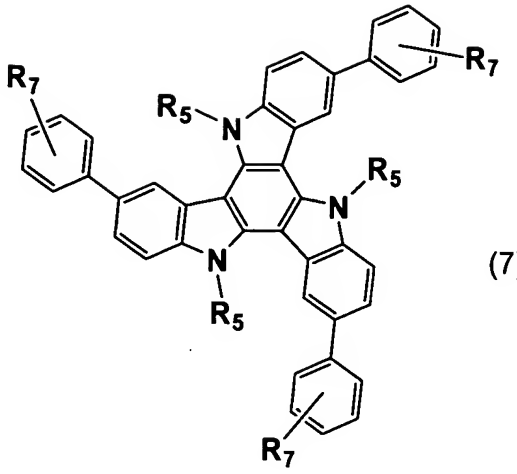


(3)

~~(~~wherein $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; and $R_6$ is hydrogen, formyl group, cyano group, C1-C6 alkoxycarbonyl group, dicyanovinyl group, aryl group or substituted aryl group~~)~~.

4.~~[4]~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (7):

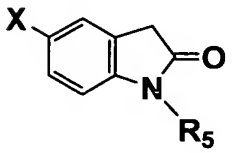
~~[formula 8]~~



(7)

~~(~~wherein $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and $R_7$ is hydrogen, formyl group, cyano group, C1-C6 alkoxycarbonyl group, aryl group or substituted aryl group~~)~~, which process comprises reacting an N-substituted-5-halo-oxyindole represented by the following general formula (4):

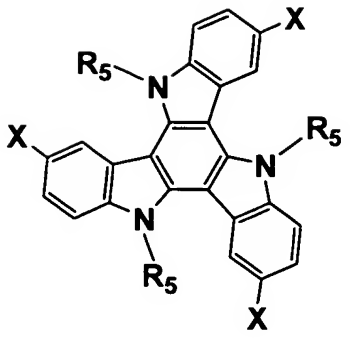
~~[formula 5]~~



(4)

~~(~~wherein $R_5$ has the same definition as given above; and X is halogen~~)~~, with a phosphorus oxyhalide to obtain an N-substituted-5-halo-triindole derivative represented by the following general formula (5):

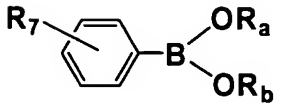
~~[formula 6]~~



(5)

~~(~~wherein $R_5$ and X have the same definitions as given above~~)~~, and ~~further~~ reacting the derivative of general formula (5) it with a boric acid compound represented by the following general formula (6):

~~[formula 7]~~

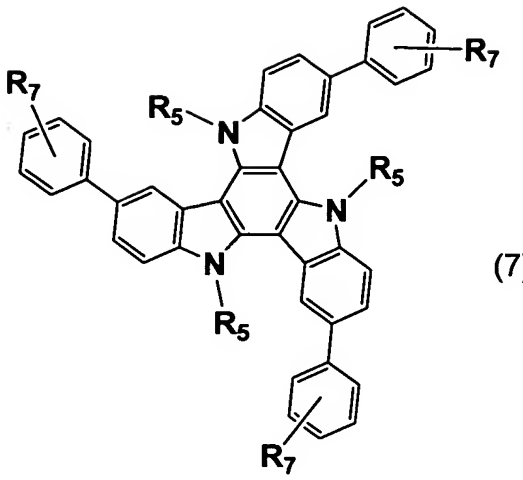


(6)

~~(~~wherein $R_7$ has the same definition as give above; and $R_a$ and $R_b$ are each independently hydrogen atom, C1-C6 alkyl group or optionally substituted phenyl group and may be combined to each other to form a ring~~)~~.

5. ~~[5]~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (7):

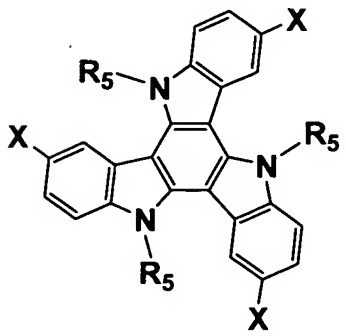
~~[formula 11]~~



(7)

~~(~~wherein $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and $R_7$ is hydrogen, formyl group, cyano group, C1-C6 alkoxycarbonyl group, aryl group or substituted aryl group~~)~~, which process comprises reacting an N-substituted-5-halo-triindole derivative represented by the following general formula (5)<u>:</u>

~~[formula 9]~~

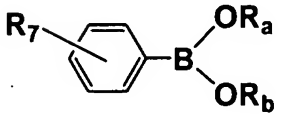


(5)

~~(~~wherein $R_5$ has the same definition as given above; and X is halogen~~)~~<u>,</u> with a boric acid compound represented by the fol-

lowing general formula (6):

~~[formula 10]~~

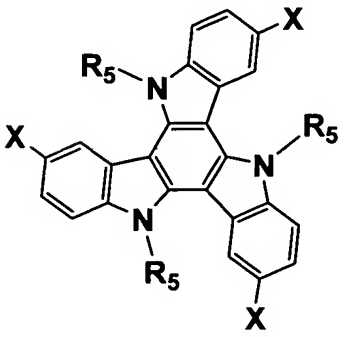



(6)

~~(~~wherein $R_7$ has the same definition as given above; and $R_a$ and $R_b$ are each independently hydrogen atom, C1-C6 alkyl group or optionally substituted phenyl group and may be combined to each other to form a ring~~)~~.

6. ~~[6]~~ (Currently amended) A process for producing an N-substituted-5-halo-triindole derivative represented by the following general formula (5):

~~[formula 13]~~

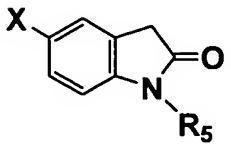



(5)

~~(~~wherein $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and X is halogen~~)~~, which process comprises reacting an N-

substituted-5-halo-oxyindole represented by the following general formula (4):

~~[formula 12]~~

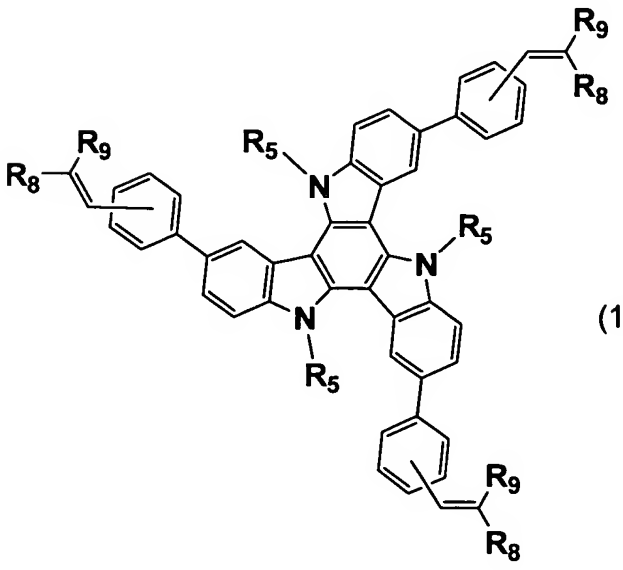



(4)

~~(~~wherein $R_5$ and X have the same definitions as given above~~)~~, with a phosphorus oxyhalide.

7. ~~[7]~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (10):

~~[formula 16]~~

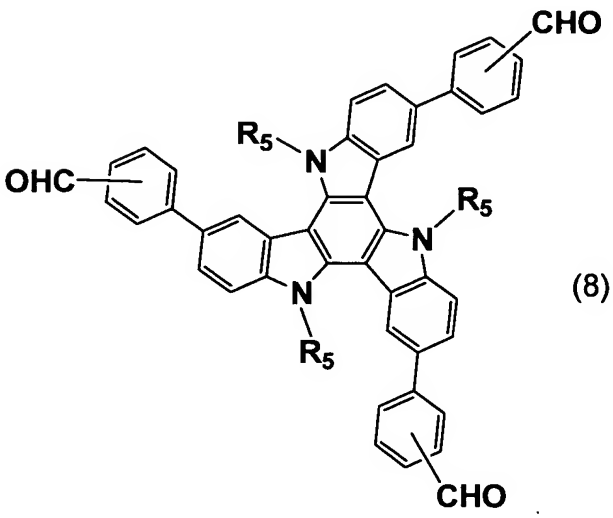



(10)

~~(~~wherein $R_5$ is C2-C12 alkyl group, substituted C2-C12 alkyl

group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; $R_8$ is hydrogen or cyano group; and $R_9$ is cyano group, carboxylic acid group, C1-C6 alkoxycarbonyl group, aryloxycarbonyl group, aryl group or substituted aryl group, which process comprises reacting a triindole derivative represented by the following general formula (8):

~~[formula 14]~~




(8)

~~(~~wherein $R_5$ has the same definition as given above~~)~~, with a methylene compound represented by the general formula (9):

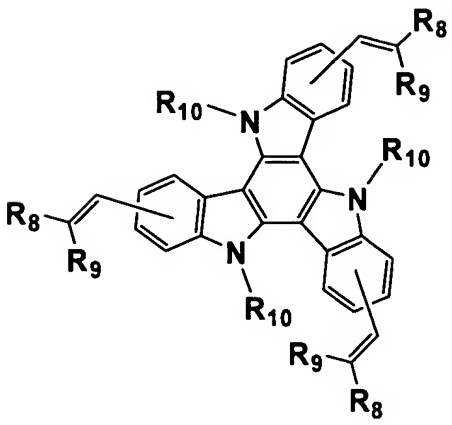
~~[formula 15]~~


(9)

~~(~~wherein $R_8$ and $R_9$ have the same definitions as give above~~)~~.

8. ~~[8]~~ (Currently amended) A Sym-triindole vinyl derivative represented by the following general formula (11):

~~[formula 17]~~

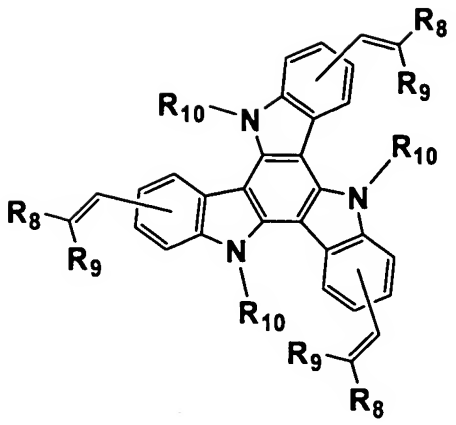



(11)

~~(~~wherein $R_8$ is hydrogen or cyano group; $R_9$ is cyano group, carboxylic acid group, C1-C6 alkoxycarbonyl group, aryloxycarbonyl group, aryl group or substituted aryl group; and $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group~~)~~.

9. ~~[9]~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (11):

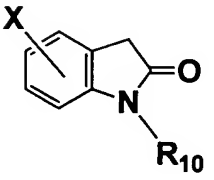
~~[formula 22]~~



(11)

~~(~~wherein $R_8$ is hydrogen or cyano group; $R_9$ is cyano group, carboxylic acid group, C1-C6 alkoxycarbonyl group, aryloxycarbonyl group, aryl group or substituted aryl group; and $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group~~)~~, which process comprises reacting an oxyindole compound represented by the following general formula (12):

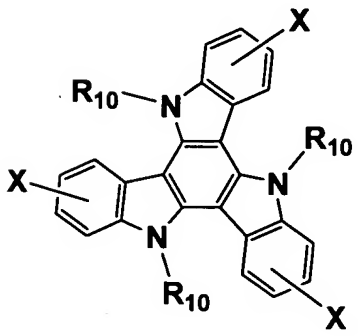
~~[formula 18]~~



(12)

~~(~~wherein $R_{10}$ has the same definition as given above and X is halogen~~)~~, with a phosphorus oxyhalide to obtain a Sym-halotriindole derivative represented by the following general formula (13):

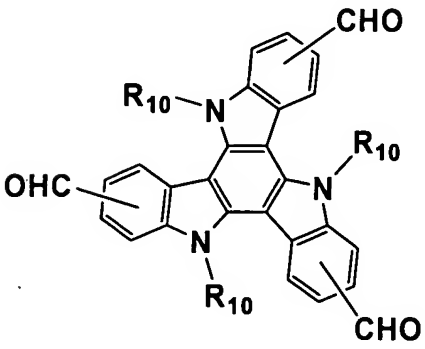
~~[formula 19]~~



(13)

~~(~~wherein $R_{10}$ and X have the same definitions as given above~~)~~, subjecting the derivative of general formula (13) ~~it~~ to formylation with a formylating agent in the presence of butyllithium to obtain a Sym-formyltriindole derivative represented by the following general formula (14):

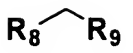
~~[formula 20]~~



(14)

~~(~~wherein $R_{10}$ has the same definition as given above~~)~~, and reacting the derivative of general formula (14) ~~it~~ with a methylene compound represented by the following general formula (9):

~~[formula 21]~~

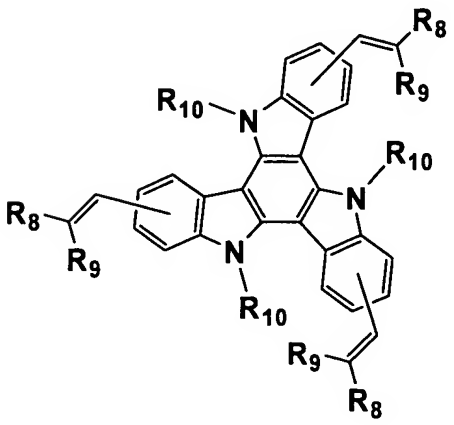


(9)

(wherein $R_8$ and $R_9$ have the same definitions as given above).

~~[10]~~10. (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (11):

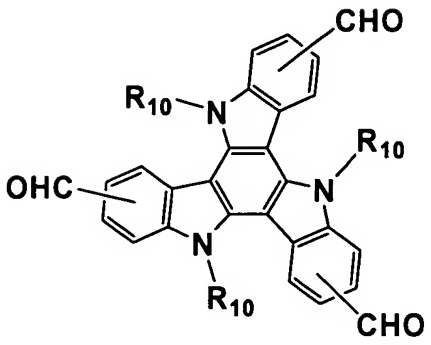
~~[formula 25]~~



(11)

~~(~~wherein $R_8$ is hydrogen or cyano group; $R_9$ is cyano group, carboxylic acid group, C1-C6 alkoxycarbonyl group, aryloxycarbonyl group, aryl group or substituted aryl group; and $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group~~)~~, which process comprises reacting a Sym-formyltriindole derivative represented by the following general formula (14):

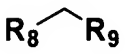
~~[formula 23]~~




(14)

~~(~~wherein $R_{10}$ has the same definition as given above~~)~~, with a methylene compound represented by the following general formula (9):

~~[formula 24]~~

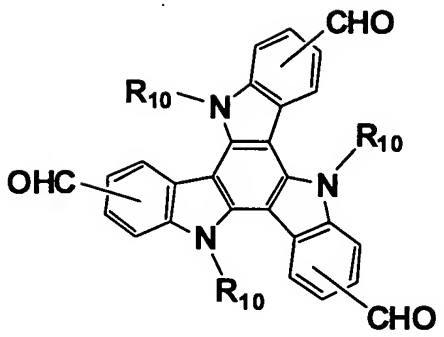



(9)

~~(~~wherein $R_8$ and $R_9$ have the same definitions as given above~~)~~.

11.~~[11]~~ (Currently amended) A process for producing a Sym-formyltriindole derivative represented by the following general formula (14):

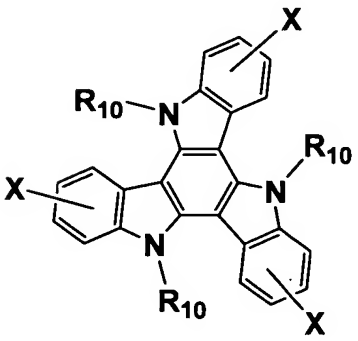
~~[formula 27]~~




(14)

~~(~~wherein $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 ~~sub-~~ ~~stituted~~ alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group), which process comprises subjecting a Sym-halotriindole derivative represented by the following general formula (13):

~~[formula 26]~~



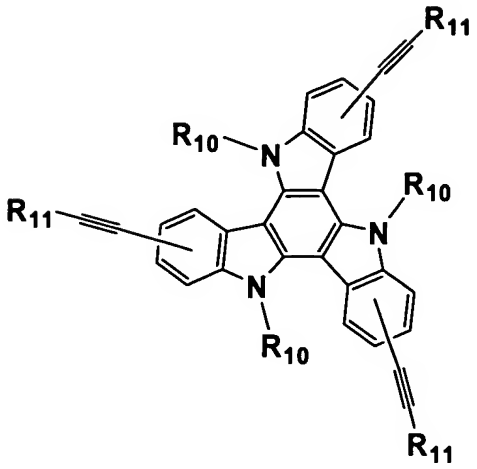

(13)

~~(~~wherein $R_{10}$ has the same definition as given above and X is halogen~~)~~, to formylation with a formylating agent in the presence of butyllithium.

12. ~~[12]~~ (Currently amended) A Sym-triindole derivative represented by the following

general formula (15):

~~[formula 28]~~

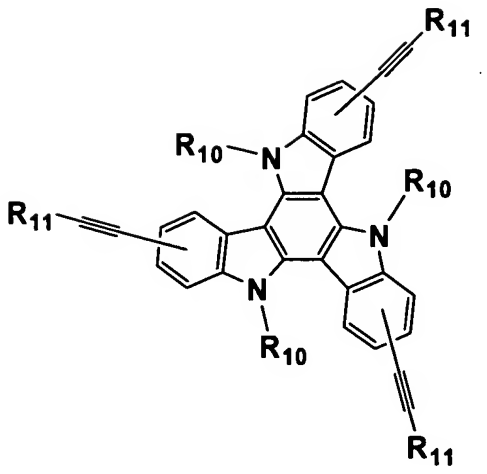



(15)

~~(~~wherein $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 ~~substituted~~ alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and $R_{11}$ is aryl group or substituted aryl group~~)~~.

13. ~~[13]~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (15):

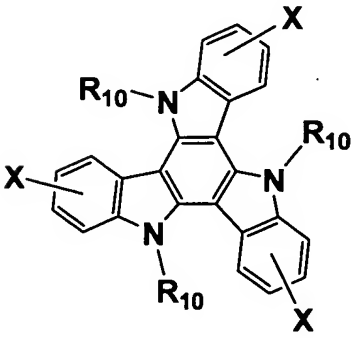
~~[formula 31]~~




(15)

~~(~~wherein $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and $R_{11}$ is aryl group or substituted aryl group~~)~~, which process comprises reacting a Sym-halo-triindole derivative represented by the following general formula (13):

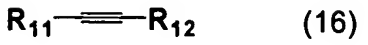
~~[formula 29]~~




(13)

~~(~~wherein $R_{10}$ has the same definition as given above and X is halogen~~)~~ with an acetylene derivative represented by the following general formula (16):

~~[formula 30]~~

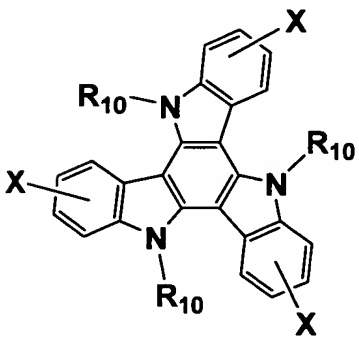


(16)

~~(~~wherein $R_{11}$ has the same definition as given above and $R_{12}$ is hydrogen or trimethylsilyl group~~)~~.

14.~~[14]~~ (Currently amended) A Sym-halo-triindole derivative represented by the following general formula (13):

~~[formula 32]~~



(13)

~~(~~wherein $R_{10}$ is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and X is halogen~~)~~.